Risk Evaluation EuroSCORE is a commonly applied risk prediction model for mortality; it may also be a determinant of possible re-sternotomy, post cardiac surgery bleeding.
Methods: A retrospective audit was carried out on 68 patients who had chest resternotomy out of a total of 1207 patients who underwent cardiac surgery in a year at a tertiary referral centre. Patients with known pre-operative increased risk of bleeding were excluded (n = 31). All re-sternotomy patients had a normal Thrombo Elasto Gram (TEG)/ Activated Clotting Time (ACT). The hospital protocol for chest reopening was followed.
Results: 70% patients underwent elective surgery, 27% had urgent surgery and 3% had an emergency procedure. Timing of the operation did not impact on the resternotomy rate (p=), However, the patients who underwent resternotomy had a higher EuroSCORE and Logistic EuroSCORE (Mean EuroSCORE 5.91 and Logistic EuroSCore of 8.04 respectively) compared to the non bleeders.
Conclusion: Our audit suggests that a high EuroSCORE may be a marker for patients returning to theatre for additional haemostasis. A prospective randomised trial is required to validate the results of our audit.

0469: PULMONARY METASTECTOMY: 3-YEAR SURVIVAL FROM A SINGLE CENTRE EXPERIENCE

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Aim: To determine the survival outcomes of pulmonary metastectomy (PM) from our tertiary cancer centre.
Methods: Retrospective analysis of our prospectively maintained computerised database was done. Patients who underwent PM between Oct 2009 and Oct 2011 were identified and surgical and survival outcomes noted. All metastasis were detected by CT scan of the chest and were discussed at an interdisciplinary meeting prior to resection. All patients underwent complete resection. Histological diagnosis of primary lung cancer or benign pathology from the resection were excluded from the results.
Results: 29 patients were identified. Histological diagnosis as follows: Colorectal metastasis = 18; Breast metastasis = 2; Renal metastasis = 4; other = 5 (n = 29). 8 patients had recurrence of disease at a later date. 11 patients had concurrent lymph node sampling at the time of procedure. 2 of these 11 patients had evidence of lymphatic involvement (10 × N1; 1 × N2). Overall survival at 3 years was 62%.
Conclusion: In our experience PM is frequently the only potentially curative therapeutic approach and long-term survival is better than nonsurgical therapies. PM is thus the treatment of choice in selected patients with pulmonary metastases.

0476: BILATERAL LUNG RESCTION FOR LUNG NEOPLASMS: DOES IT INCREASE PATIENT MORBIDITY AND MORTALITY?

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Aim: We present a 5 year experience of our tertiary referral thoracic lung cancer surgery unit in managing patients with bilateral malignant lung lesions.
Methods: We retrospectively reviewed our prospective thoracic database for patients who underwent bilateral thoracotomies for malignant lesions between Jan 2009 and July 2014.
Results: 18 patients were identified. Mean age was 73 years. During first admission 13 patients had a primary lung cancer; 5 patients had metastatic disease from other sites. At second operation 11 patients had synchronous primary lung cancers; 7 had metastatic disease. Overall 6 patients had bilateral synchronous primary lung cancers. Mean length of stay was 5.3 days for the first procedure and 7 days for the second. There was no significant difference in the rates of complications between the first and second operations including air leak and respiratory failure.
Conclusion: Resection of bilateral lung neoplasms does not cause an unacceptable increase in morbidity or mortality versus unilateral lung resection. One third of patients had synchonrous primary tumours, thus resection of the contralateral lung mass would be an acceptable management approach to increase survival. Length of hospital stay was increased for the second procedure, and patients should expect a longer rehabilitation period.

0514: AN AUDIT OF THE NICE GUIDELINES IN ANTIMICROBIAL PROPHYLAXIS AGAINST PROSTHETIC AND NATIVE VALVE ENDOCARDITIS AT FREEMAN HOSPITAL

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Aim: Prosthetic valve endocarditis is a complication of valve replacement surgery. NICE guidelines, changed in 2008, recommend that prophylactic antibiotics need not be routinely taken with valve replacement due to lack of supporting evidence. Our aim was to assess the impact of 2008 NICE Guidelines on the incidence of prosthetic (PVE) and native valve endocarditis (NVE).
Methods: Retrospective study of surgically treated patients in the last 10 years using electronic records and discharge letters. Patients and annual valve operations were identified from theatre database. The following standards were audited:

- Incidence of both types should not be increasing
- Incidence of PVE should be less than 2.5%

Results: Over 10 years, 140 patients were treated surgically for infective endocarditis (PVE = 38 and NVE = 102). The incidence of surgically treated PVE fluctuated every year with no identifiable trends and did not exceed 2.5%. A shift in the onset of PVE from late (>60days) to early (<60 days) was seen. The incidence of NVE treated surgically had risen significantly since the guideline change (P = 0.02).
Conclusion: Surgically treated PVE met the standards with incidence below 2.5% whilst NVE did not meet standards by increasing every year. This audit should then be compared with the results of the National Endocarditis Database project when published.

0567: SURGICAL SAFETY CHECKLIST USE IN CARDIAC SURGERY: AN AUDIT ADDRESSING HUMAN FACTORS LEADING TO A SUSTAINED IMPROVEMENT IN PRACTICE

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Aim: Surgical checklists are proven to reduce morbidity and mortality, are mandatory in the NHS since 2010 and are class I recommendations from EACTS Guidelines for cardiac surgery. Following a 'near miss' we sought to audit practice within our unit.
Methods: We assessed use of local WHO checklist during 3 separate 'snapshot' periods (Oct 2013–Feb 2014) for all consecutive cardiac operations and verified if it was undertaken and fully completed for: basic details, sign-in, time-out, sign-out. All stakeholders were involved to overcome barriers to improvement.
Results: Prior to the first cycle there was poor awareness and understanding amongst the MDT-96% of checklists and only 2% fully complete. After presentation at clinical governance meeting, the second cycle demonstrated an improvement (72% fully done). However sign-out was still poor (79%).
We identified a lack of leadership and teamwork so compulsory pre-theatre list 'huddles' and debrief sessions were initiated which showed further sustained change in practice during the third audit cycle.
Conclusion: Audit demonstrates sustained improvement in completion of safety checklist, although still must address sign-out completion to achieve 100% compliance.
Other units may benefit from human factors and teamwork training as these impact on patient safety in cardiac theatres.

0579: ENHANCED RECOVERY AFTER THORACIC SURGERY: OUTCOMES FOLLOWING IMPLEMENTATION OF A TAILORED ERAS PATHWAY IN A TERTIARY CENTRE

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